

REMARKS

Claims 17-23 are pending and rejected; and claims 24-26 are withdrawn in this application. Claims 17 and 18 are amended hereby.

Responsive to the rejection of claims 17-23 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,771,197 (Ivanto et al.) in view of U.S. Patent No. 4,761,602 (Leibovich), Applicant has amended claim 17 and submits that claims 17-23 are now in condition for allowance.

Ivanto et al. disclose a frequency converter-controlled squirrel cage motor (Fig. 1) including an axle 4 that is stationary. Axle 4 is fixed to stands 12, which conduct the support loads to the motor mounting base. On axle 4, stator 3 is integrally mounted and electrical leads 7 coming to stator 3 run through a cable entry 6 provided in axle 4. A cylinder 1 is rotatably carried on stationary axle 4 by way of end plates 13 and bearings 5 (column 1, line 62 through column 2, line 5).

Leibovich discloses a compound short circuit induction machine and method of its control (Figs. 1-9) including a rotor winding 20. Rotor winding 20 includes conductor elements 21a-e, which are symmetrically arranged and received in slots of a laminated steel rotor structure, not shown. Conductor elements 21a-e may be bars of copper or aluminum with rings 22 and 23 being formed of the same material. A cylindrical stator 30 is formed of an annular laminated steel core 32 having a plurality of axially extending slots 34a-l (column 6, lines 10-68). Stator coils 36 and 38 are configured of a large number of turns of a conductive material, such as copper wire formed in generally rectangular configuration and inserted or wound in slots spaced a certain distance apart (column 7, lines 5-10).

In contrast, claim 17 as amended, recites in part:

a machine actuator having a functional part with a short circuit arrangement associated with said rotor for operating said actuator, said short circuit arrangement includes hollow short circuit conductors welded to said rotor.

(Emphasis added). Applicant submits that such an invention is neither taught, disclosed nor suggested by Ivanto et al., Leibovich or any of the other cited references, alone or in combination and include distinct advantages thereover.

Ivanto et al. discloses a frequency converter-controlled squirrel cage motor having a cylinder that is rotatably carried on a stationary axel. Leibovich. disclose a compound short circuit induction machine having conducting elements that are bars of copper or aluminum. The common understanding of the word 'bar' is a material of a solid nature, which when applied to the combination of Ivanto et al. and Leibovich results in an electric motor having conducting elements of solid bars of copper or aluminum. Therefore, Ivanto et al., Leibovich and any of the other cited references, alone or in combination, fail to disclose, teach or suggest a machine actuator having a functional part with a short circuit arrangement associated with a rotor for operating the actuator, the short circuit arrangement includes hollow short circuit conductors welded to the rotor, as recited in claim 17.

An advantage of Applicant's invention is that it is possible to direct cooling air to the hottest spots of the rotor assembly, which in turn allows an increase in the maximum output of the motor. Another advantage of the present invention is that it allows for an increased number of starts/stops. For the foregoing reasons, Applicant submits that claim 17, and claims 18-23 depending therefrom, are now in condition for allowance, which is hereby respectfully requested.

For the foregoing reasons, Applicant submits that no combination of the cited references teaches, discloses or suggests the subject matter of the amended claims. The pending claims are therefore in condition for allowance, and Applicant respectfully requests withdrawal of all rejections and allowance of the claims.

In the event Applicant has overlooked the need for an extension of time, an additional extension of time, payment of fee, or additional payment of fee, Applicant\$ hereby conditionally petitions therefor and authorizes that any charges be made to Deposit Account No. 20-0095, TAYLOR & AUST, P.C.

Should any question concerning any of the foregoing arise, the Examiner is invited to telephone the undersigned at (260) 897-3400.

Respectfully submitted,

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